

Assignment

Topic Name: ERD

Submitted to: Sir Imran Mughal

Submitted by: Maimoona Khilji

Registration No: 195300273

Class Section: A

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Assignment 1

Real Life Problem Analysis using ER Model with Basic and Enhanced concepts and notations.

Real Life Problem: Hospital Management System

Entities:

- Hospital
- Doctors
- Patients
- Medical Test
- Receptionist
- Records

Entity Relationship:

- **One** Hospital has **many** Doctors.
- **Many** Doctors attend **many** Patients
(In other words, different doctors check different patients in one hospital at a time.)
- **One** Patient may have **zero** or **many** Medical Test Reports.

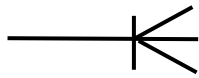
Note:

- Disjoint rule is used because a **Doctor** must be either a Trainee, Visiting or Permanent doctor.

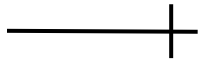
Attributes:

<u>Attribute</u>	<u>Entity</u>
<u>Primary Key</u>	
Hos_ID	Hospital
Doc_ID	Doctors
Record_ID	Records
P_ID	Patients
<u>Composite Attribute</u>	
Address (Composed of Colony, City, Zip)	Hospital, Patients
<u>Derived Attribute</u>	
Age (Derived of Date of birth i.e. D_O_B)	Patients
<u>Multivalued Attribute</u>	
Phone_No.	Patients

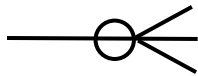
Notations:



One or Many

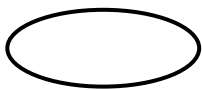


One (at least one)



Zero or Many

Symbols:



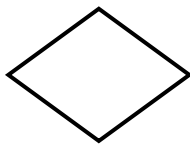
Attribute



Derived Attribute



Multivalued Attribute



Relationship



Entity

